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GREEK AND COPTIC SCHOOL TABLETS AT THE UNIVERSITY OF MICHIGAN

BY A. E. R. BOAK

The University of Michigan has recently acquired three ancient school tablets from Egypt. Of these two are Greek and one Coptic. They are all of wood, not waxed but originally coated with a white preparation which fitted them for writing in ink. Tablets of this type have been described by F. G. Kenyon, "Two Greek School Tablets," *J.H.S.*, 1909, pp. 29 ff. The Greek tablets are each pierced with two holes on one of the longer sides, which may indicate that they were at one time attached to other similar wooden leaves to form dyptics. However, since one of the holes is still filled by a fragment of a wooden peg, these apertures may have been used for some other purpose than the passage of leather thongs or wire for binding. Feeling that these tablets may have some points of interest for students of Greek life, I have given herewith a transcription of their contents, with a few notes upon the peculiarities of each.

I

TABLET NO. 1

(recto)

1	2	3	4	5	6	7	8	9
<u> α</u>	<u>βαβ</u>	<u>[γαγ</u>	<u>δαδ</u>	<u>ζαζ</u>	<u>θαθ</u>	<u>ιαι</u>	<u>κακ</u>	<u>λαλ</u>
<u>ε</u>	<u>βεβ</u>	<u>γεγ</u>	<u>δεδ</u>	<u>ζεζ</u>	<u>θεθ</u>	<u>ιει</u>	<u>κεκ</u>	<u>λελ</u>
<u>η</u>	<u>βηβ</u>	<u>γηγ</u>	<u>δηδ</u>	<u>ζηζ</u>	<u>θηθ</u>	<u>ιηι</u>	<u>κηκ</u>	<u>ληλ</u>
<u>ι</u>	<u>βιβ</u>	<u>γιγ</u>	<u>διδ</u>	<u>ζιζ</u>	<u>θιθ</u>	<u>ιιι</u>	<u>κικ</u>	<u>λιλ</u>
<u>ο</u>	<u>βοβ</u>	<u>γογ</u>	<u>δοδ</u>	<u>ζοζ</u>	<u>θοθ</u>	<u>ιοι</u>	<u>κοκ</u>	<u>λολ</u>
<u>υ</u>	<u>βυβ</u>	<u>γυγ</u>	<u>δυδ</u>	<u>ζυζ</u>	<u>θυθ</u>	<u>ιυι</u>	<u>κυκ</u>	<u>λυλ</u>
<u>ω</u>	<u>βωβ</u>	<u>γωγ</u>	<u>δωδ</u>	<u>ζωζ</u>	<u>θωθ</u>	<u>ιωι</u>	<u>κωκ</u>	<u>λωλ</u>
δ								

(verso)

1 α β γ δ ε ζ η θ ι κ λ μ ν ξ ο π
 2 ω ψ φ χ υ τ ς ρ π ο + ν μ λ κ ι θ η ζ ε δ . .
 3 α ω β ψ γ χ δ φ ε υ ζ τ η ς θ ρ ι π κ ο λ ξ μ ν

No. 1 is a single board 14 in. long and 4 in. wide, with the writing running parallel to the long sides. The letters are uncials, varying from $\frac{1}{4}$ to $\frac{1}{2}$ in. in height. On the side which I shall for convenience call the recto, there are nine columns of seven lines each. The first column contains the seven vowel signs, α to ω, the α apparently having been written in two forms, only one of which is at all legible. In the remaining columns each of these vowels in succession is written in conjunction with the consonants in their alphabetical order, in such fashion that syllables are formed by placing the same consonant before and after the vowel, e.g., βαβ, βεβ, γαγ, γεγ. The exercise was only continued as far as the letter λ, and it is interesting to note that iota is used as a consonant as well as a vowel, thus giving the curious combination ιι. This exercise is a good illustration of the method of instruction in reading and writing described by Dionysius, in his treatise *On the Arrangement of Words*.¹ A similar exercise on a fragment of parchment has been published by Wessely.² It seems that as each separate vowel or syllable was completed a line was usually drawn beneath it. If these lines had been drawn previously for the pupil's guidance, they would hardly have been at such irregular intervals or have been omitted in columns 2, 5, 6, 8, 9, beneath the last lines. An effort would also have been made to keep the corresponding lines in the several columns upon the same horizontal level. In column 2 the pupil at first omitted the syllable βοβ and had to insert it in small letters between βιβ and βυβ. These peculiarities have been omitted intentionally from the transcription.

The verso of this tablet contains three lines only, which cover approximately the upper third of its surface, and are blurred toward

¹ *De comp. verb.* 25: τὰ γράμματα ὅταν παιδευόμεθα, πρῶτον μὲν τὰ ὀνόματα αὐτῶν ἐκμανθάνομεν, ἔπειτα τοὺς τύπους καὶ τὰς δυνάμεις, εἰθ' οὕτω τὰς συλλαβὰς καὶ τὰ ἐν ταύταις πάθη, κτλ. ὅταν δὲ τὴν τοῦτων ἐπιστήμην λάβωμεν, τότε ἀρχόμεθα γράφειν τε καὶ ἀναγινώσκειν, κατὰ συλλαβὴν, κτλ.

² *Einige Reste griechischer Schulbücher, Studien zur Paläographie und Papyruskunde*, II (1902), p. lv, No. 12.

the right. They form a series of exercises on the alphabet. Line 1 contains the alphabet in the regular order of vowels and consonants from α to π . Line 2 has the letters in retrograde order from ω as far as γ , with a peculiar χ written erroneously for ξ , and ϕ and χ transposed. Line 3 shows an attempt to combine the systems of 1 and 2 by taking the letters of the alphabet in their regular order and placing after each of them the corresponding letter taken from the inverted order. In the combined scheme the letters in regular order occupy the spaces 1, 3, 5, etc.; those in inverted order the spaces 2, 4, 6, etc. As now visible, the letters run from $\alpha \omega$ to $\mu \nu$. Wessely¹ has published examples of the alphabet written in the regular and then in the reverse order, like lines 1 and 2, but I have been unable to find another instance of the combination occurring in line 3.

II

TABLET NO. 2

(recto)

1 $\nu \nu$
 2 $\gamma \epsilon \omega \phi \iota$
 3 $\rho \omicron \beta \alpha . \beta \mu \omega \nu$
 4 . . $\nu . \iota \kappa \iota$
 5 $\pi \mu \nu \eta \varsigma$
 6 $\epsilon \nu \tau \epsilon \mu \alpha \nu$
 7 $\mu \omega \nu \epsilon . . .$
 8 . $\pi \omicron \lambda$
 9 . $\iota \kappa \tau \omega$
 10 $\mu \alpha$
 11 $\alpha \tau \omicron \xi . \nu$
 12 $\alpha . \epsilon \nu$
 13 $\pi \epsilon \iota \nu$
 14 $\pi \gamma \epsilon \tau \nu \rho \iota$
 15 μ
 16 α
 17 $\pi \epsilon$
 18 $\sigma \tau \iota$
 19 $\alpha \rho \omega \nu$

 20 $\pi \eta \rho \epsilon$

Fig. A

 $\chi \epsilon \iota . \lambda$

Fig. B

¹ *Op. cit.*, p. xliv, No. 2, ll. 1, 2.

(verso)

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>α α</u>	<u>ι ι</u>	<u>π π</u>	μ
<u>β β</u>	<u>κ κ</u>	<u>ο ο</u>	β
<u>γ γ</u>	<u>λ λ</u>	<u>ρ ρ</u>	γ
<u>δ δ</u>	<u>μ μ</u>	<u>ς (ς)</u>	δ
<u>ε ε</u>			
<u>ς ς</u>	<u>ν ν</u>	<u>τ τ</u>	ε
<u>ξ (ξ)</u>	<u>ξ ξ</u>	<u>υ (υ)</u>	ς
<u>η η</u>		<u>φ φ</u>	ξ
<u>θ θ</u>	<u>ο ο</u>	<u>χ χ</u>	η
		<u>ψ ψ</u>	θ
		<u>ω ω</u>	. α . τ α
		τ τ	

This tablet is 15 in. long and 6 in. wide. One corner, the upper right-hand one of the side to be called the recto, is broken off. This break occurred before the tablet was discarded, to judge from the grouping of the writing on the verso. As on No. 1, the letters are large irregular uncials, $\frac{1}{2}$ to $\frac{3}{4}$ in. high.

On the recto the writing consists of twenty lines, here paralleling the shorter sides of the tablet. Each line contains a number of isolated letters, not grouped in syllables or words. Apparently we have here the work of a beginner practicing the forms of the letters, a supposition which is substantiated by the crude and irregular penmanship. The lower right half of this surface is filled by two childish figures, probably attempts to depict the teacher or a fellow-pupil.

On the verso, in contrast to the recto, the writing runs parallel to the longer sides of the tablet. Here we have an exercise on the cardinal numerals, as far as 9,000. Those from 1 to 900 (*α* to *τ*) are each written twice, with a line drawn beneath each successive pair of numbers. The remainder are not duplicated. As on the recto, the letters are irregular in size and badly formed. This exercise may be compared with another fragment edited by Wessely,¹ which, however, is not nearly so complete.

¹ *Op. cit.*, p. lv, No. 12.

III

While Tablets 1 and 2 consist of single pieces of wood, No. 3, the Coptic tablet, was originally made up of three smaller pieces glued together at the long edges. The upper third is broken off, leaving clear traces of the glue. The two remaining pieces form a tablet $15\frac{1}{2}$ in. long and $4\frac{1}{2}$ in. wide.

This tablet contains an exercise on vowels and syllables, resembling very closely the Greek exercise on the recto of No. 1. Here the exercise begins on the recto and is finished on the verso. It consists of the seven vowels preceded by the guttural ω (*sch*), written at first alone and then followed by each of the consonants in their order. Here, again, iota, as on No. 1, is given a place among the consonants. The exercise was done with considerable care, the letters being neatly formed and averaging not over $\frac{1}{4}$ in. in height. The lines parallel the long sides of the tablet, and the columns are marked off at the sides and bottom by uneven lines. This exercise gives a clear picture of the composition of the Coptic alphabet, which is simply the Greek alphabet plus seven demotic signs. It is to be noted that one of these, ς (*kh*), which should follow γ (*f*), has been omitted, probably inadvertently.

In addition to the main exercise, there are on the verso eight short columns, which contain further practice in forming syllables and words.

It is rather difficult to assign dates for the writing on the respective tablets, because the letters lack any definite characteristics which might place them in some particular century. However, they certainly belong to a late epoch, the Greek tablets being probably not older than the fourth, and the Coptic not older than the fifth, century.

NOTE:—*The Cornhill Magazine*, 1920, pp. 700 ff., contains an article entitled "On Tour in Eastern Darfur," by Major E. Keith-Roach, the British Inspector of the Eastern Soudan. In describing the native village schools the author refers to the use of wooden writing tablets, which he calls "slates." "The slates," he says, "are flat pieces of wood about 18 inches long, and a third of that across, with a handle at the top. They are prepared for use by washing and rubbing over with a mixture of

powdered white stone and water." The ink "is a mixture of soot, gum, and water, boiled over the fire." "The *fikki* (teacher) makes the pens that are needed from thick grass, on the same principle as a quill pen." The writing material in the native elementary schools of the Soudan today is therefore exactly the same as that employed throughout Egypt under Greek and Roman rule.

UNIVERSITY OF MICHIGAN